ABSTRACT OF THE DISCLOSURE

A seal assembly for use with a rotating element such as a shaft includes a case having an axial portion and a radial portion. A seal body is bonded to at least the radial portion of the case. A hinge is bonded to the seal body adjacent to a terminating section of the radial portion of the case. A lip is bonded to the hinge. A liner is attached to the lip. The majority of bending loads and stresses are incurred in the hinge, thus increasing the life of the liner.